

# Work Order ID 110737

January-07-14 3:02:12 PM

**\*110737\***

Page 1

Item ID: D3335 Accept **\*N900040100\*** Setup Start **\*NS1\***  
 Revision ID: Stop **\*NS2\***  
 Item Name: Spring  
 Start Date: 1/07/14 Start Qty: 10.00 **\*10\*** Cust Item ID:  
 Required Date: 1/07/14 Req'd Qty: 10.00 **\*10\*** Customer:  
 Reference:

Approvals: Process Plan: MLJ Date: 14-01-08 Tooling: \_\_\_\_\_ Date: \_\_\_\_\_ Run Start **\*NR1\***  
 QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_ Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D3335	Rev D								

100 PURCHASING 0.00  
**\*100\***  
 Purchasing Memo 0.00  
 Purchasing Issue P/O: 22631  
 Manufacture as per dwg D3335  
 Possible supplier: Victory Springs

CL 14/01/15 (10)

110 Receive & Inspect for Damage & Mat'l Certs 0.00  
**\*110\***  
 Packaging Memo 0.00  
 Packaging Ensure Material Release Note is attached

14/01/29 (10)

120 QC5- Inspect part completeness to step on W/O 0.00  
**\*120\***  
 QC Memo 0.00  
 Quality Control

DAS  
 27  
 9:39  
 4/1/29

10

DQA: \_\_\_\_\_ Date: \_\_\_\_\_



## WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order update only ☐

Work Order: _____  Part No. _____  NCR No. _____	<b>DISPOSITION</b>  Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Suspected Unapproved <input type="checkbox"/>	<b>AGAINST DEPARTMENT/PROCESS</b>  <table style="width:100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>	
Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>															
Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>															
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Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>																

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

### FAULT CATEGORY

<b>Landing Gear</b> <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric <input type="checkbox"/> Cracks <input type="checkbox"/> Crimp/Kink/Ripple/Wave <input type="checkbox"/> Cuffs <input type="checkbox"/> Crushing <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Marks/Chatter <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	<b>General</b> <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damage/Defect <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drawing <input type="checkbox"/> Drill Holes <input type="checkbox"/> Finish <input type="checkbox"/> Fit/Function	<input type="checkbox"/> Folio/Program <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete/Unqualified <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Misaligned/off center <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Off-set <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence	<input type="checkbox"/> Outside Dimensions <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge  <input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Set-up <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other
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\*110737\*

Page 2

January-07-14 3:02:13 PM

Item ID: D3335 Accept \*N900040100\* Setup Start \*NS1\*  
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 Required Date: 1/07/14 Req'd Qty: 10.00 \*10\* Customer:  
 Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_ Run Start \*NR1\*  
 QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_ Stop \*NR2\*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130	Identify as per dwg & Stock Location: <u>ST038</u>	0.00				DAS 32 <del>9-89</del>			(10)
*130*									
Packaging	Memo	0.00							
Packaging									
140	QC21- Final Inspection - Work Order Release	0.00							
*140*									
QC	Memo	0.00							
Quality Control									

MLJ 14-02-04

(11) 14-01-30

DQA: \_\_\_\_\_ Date: \_\_\_\_\_



## WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order update only ☐

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# Picklist Print

January-07-14 3:02:12 PM

Page 1

Work Order ID: 110737

Parent Item: D3335

Parent Item Name: Spring

Start Date: 1/07/14

Required Date: 1/07/14

Start Qty: 10.00

Required Qty: 10.00

Comments: IPP A04.11.23New issueKJ/JLM  
esr B 07.04.04 rev C dwg EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D3335-P Spring		Purchased	No			110	f	0.0000	1	10		1/14/14	EC

DQA: \_\_\_\_\_ Date: \_\_\_\_\_



## WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order update only ☐

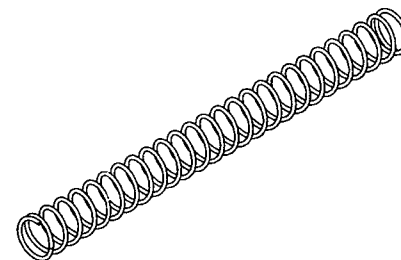
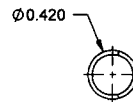
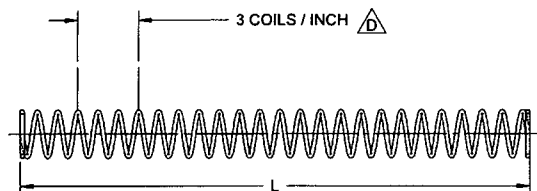
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# SPECIFICATION CONTROL DRAWING



**D3335-X SPRING**

DART P/N	L (in)	
D3335-1	4.38	△
D3335-3	7.63	△
D3335-5	1.20	△

110737 MJS  
14-01-08

**RELEASED**  
8/2/05/11

**NOTES:**

- 1) MATERIAL: SPRING STEEL, Ø0.035 WIRE
- 2) FINISH: LPS PROCYON
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: N/A
- 8) POSSIBLE SUPPLIER: VICTORY SPRINGS, LENGTH REQUIRED: 12"

DESIGN	MB	PH	08.06.05
DRAWN		RF	05.12.19
CHECKED		MB	05.08.11
MFG. APPR.		MB	04.12.07
APPROVED		BY	DATE
DE APPR.			
DATE	08.06.05		

DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWING NO. D3335	REV. D SHEET 1 OF 1
TITLE SPRING	SCALE NTS

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NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT  
WRITTEN PERMISSION FROM DART AEROSPACE LTD



Dart Aerospace Ltd.  
1270 Aberdeen Street  
Hawkesbury, ON K6A 1K7  
Tel: 613 632 9577  
Fax: 613 632 1053

## PURCHASE ORDER

Purchase Order ID PO22631

Purchase Order Date 1/15/2014

PO Print Date 1/15/2014

Page Number 1 of 1

**Order From :**

VC-VIC002

VICTORY SPRING LTD.  
#2 6104 - 82 AVE.  
EDMONTON, AB T6B 0E7  
CA

**Ship To :** DART AEROSPACE LTD  
1270 ABERDEEN  
HAWKESBURY, ON K6A 1K7  
CANADA

FAVORITE  
1/15/2014

**Contact Name**

**Vendor Phone** 866 230 5312

**Ship To Contact**

**Ship To Phone**

**Ship Via:** FedEx PI collect

**Ship Acct:**

**Buyer**

Chantal Lavoie

**Customer POID**

**Customer Tax #** 10127-2607

**Terms**

Net 30

**Currency**

CAD

**FOB**

Destination-Collect

Line Nbr	Reference Vendor Part Number Line Comments Delivery Comments	Description/ Mfg ID	Req Date/ Taxable Promise Date	CD	Req Qty/ Unit of Measure	PO Unit Price	Extended Price
1	D3335-P	Spring	1/22/2014 Yes 1/22/2014		10.00 f	\$15.28	\$152.80

AS PER DWG D3335 REV. D  
B110737  
MATERIAL: SPRING STEEL 0.035 WIRE LENGHT 12"

**Line Total:** \$152.80

**PO Total:** \$152.80

**Note:** Pricing listed above is as per contract agreement between Dart Aerospace and the respective manufacturer.  
No substitution or deviation without consent.  
Certificate of Conformity or Material Certification required - YES NO  
PST# 6122-5207

Change Nbr:

1

Change Date: 1/15/2014



**PACKING SLIP**

28889

#2, 6104 - 82 Ave  
Edmonton, AB T6B 0E7  
t + 780 442 4020  
f + 780 466 8000

**BILL TO:** Dart Aerospace Ltd  
1270 Aberdeen Street  
Hawkesbury, ON K6A, 1K7

**SHIP TO:**

DATE		ORDER No		SHIP VIA	
27-Jan-14		PO17374		22631 FedEx P1	
QUANTITY	DESCRIPTION			UNIT	AMOUNT
10	D3335-P Compression Spring				
GST #	TERMS	SUBTOTAL	FREIGHT	GST	TOTAL
854454527	NET 30 DAYS				

## CERTIFICATE OF CONFORMANCE

REPORT FOR : Dart Aerospace	DATE: 1/27/2014
PART/DRAWING #: D3335-P	PO # PO17374
DESCR: Compression Spring	QUANTITY: 10

CHARACTERISTIC	SPECIFIED	MEASURED	NOTES
Material type	SS 302	Yes	
Material diameter	0.035"	Yes	
Coil I.D.		0.360"	
Coil O.D.	.420"	0.430"	
Number of Coils	3 / inch	3.1 / inch	
Free Length	12.00"	12.20" - 12.50"	
End Type	Closed, not ground	Yes	

### COMMENTS

Mill Certificate attached: No  
Material Heat Number: Available upon request.

Inspected by: *Jeremy Burrowes*